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L7
    ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 2004:993205 CAPLUS

DN 141:425088

Water-repellent unsaturated polyester compositions TI

IN Uchida, Kazushige; Kurashiki, Toshio; Agari, Yasuyuki; Otsuka, Keiko

PA Matsushita Electric Works, Ltd., Japan

Jpn. Kokai Tokkyo Koho, 14 pp. SO

CODEN: JKXXAF

DT Patent

LΑ Japanese

FAN.CNT 1

PΙ

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
		-				
	JP 2004323602	A2	20041118	JP 2003-117595	20030422	
lΙ	JP 2003-117595		20030422			

PRAI JP 2003-117595

The invention relates to unsatd. polyester compns., useful for bathtubs, walls, artificial marbles, to give moldings having water-repellent surface layers with thickness ≥10 µm. The compns. may further contain water-repellent macromonomers. Thus, a molding comprising a vinyl ester polymer (KF 47K-1), a macroazo initiator (VPS 1001), a monomeric initiator (Trigonox 121-50), and Me methacrylate showed water contact angle (JIS K 2396) before and after polishing 50-μm depth 104.9 and 92.8°, resp.

IΤ 794587-45-4P

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation) (unsatd. polyester moldings having water-repellent surface layers manufactured from water-repellent macro initiators and macromonomers)

RN 794587-45-4 CAPLUS

Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with α -[(3-CN aminopropyl)dimethylsilyl]-o-[[(3-aminopropyl)dimethylsilyl]oxy]poly [oxy(dimethylsilylene)], KF 47K1 and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM1

CRN 793723-65-6 CMF Unspecified CCI PMS, MAN

STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

CCI PMS

CM 3

CRN 2638-94-0 CMF C12 H16 N4 O4

CM 4

CRN 80-62-6 CMF C5 H8 O2

RN

CN

792937-09-8 CAPLUS

e (9CI) (CA INDEX NAME)

```
L7
     ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
     2004:993027 CAPLUS
AN
DN
     141:412526
TI
     Method and coating solutions for forming water-repellent films
     on automotive or building glasses
IN
     Kumon, Soichi; Hatanaka, Kaname; Akamatsu, Yoshinori; Hamaguchi, Shigeo;
     Kuramasu, Haruki; Arai, Hiroaki
PA
     Central Glass Co., Ltd., Japan
     Jpn. Kokai Tokkyo Koho, 17 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 1
                         KIND
                                DATE
     PATENT NO.
                                            APPLICATION NO.
                                                                   DATE
     ______
                         ____
                                -----
PI
     JP 2004323250
                          A2
                                20041118
                                            JP 2003-116153
                                                                    20030421
PRAI JP 2003-116153
                                20030421
     The films capable of sliding and dropping water droplets, are manufactured by
     adding water and acid catalysts to organic solvent solns. containing (1)
     R14-aSi(OR2)a (R1, R2 = hydrocarbyl; a = 3, 4), (2) (R3O)pMe3-
     pSiA1SiMe2(OSiMe2)nA2Si(OR4)qMe3-q (I; A1, A2 = hydrocarbylene,
     (CH2) iNHCO2, O; i = 0-9; R3, R4 = hydrocarbyl; n \le 2000; p, q =
     0-3; p + q \ge 3], and (3) B(CF2)rCH2CH2SiMe3-sXs (B = CF3,
     CH2CH2SiMe3-tYt; X, Y = hydrolyzable group; t = 1-3; r = 0-12; s = 1-3) to
     simultaneously hydrolyze and polycondense the 3 components to give
     precoating solns. The claimed coating solns. comprise the above 3
     components, organic solvents, water, and acid catalysts and contain
     polycondensed products of the 3 components. Thus, a solution containing
     tetraethoxysilane, heptadecafluorodecyltrimethoxysilane, I (R3 = R4 = Me,
     p = q = 3, A1 = A2 = CH2CH2, n = 250) and HNO3 were stirred to give a
     polycondensed product-containing coating solution, which was applied on a glass
     plate, dried, heated, and cooled to give a transparent film showing
     contact angle 107°.
IT
     792937-09-8P
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (coating solns. containing alkoxysilanes, alkoxy-terminated di-Me
        silicones, and fluoroalkylsilanes for forming water-repellent
        films on automotive or building glasses)
```

Silicic acid (H4SiO4), tetraethyl ester, polymer with α -[dimethyl[2-

(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)trimethoxysilan

(trimethoxysily1)ethy1]sily1]oxy]poly[oxy(dimethylsilylene)] and

(trimethoxysily1) ethyl] sily1] $-\omega$ - [[dimethyl[2-

CM 1

CRN 160480-15-9

CMF (C2 H6 O Si)n C14 H38 O7 Si4

CCI PMS

CM 2

CRN 83048-65-1

CMF C13 H13 F17 O3 Si

$$\begin{array}{c} \text{OMe} \\ | \\ \text{MeO-Si-CH}_2\text{-CH}_2\text{-(CF}_2)} \\ | \\ \text{OMe} \end{array}$$

CM 3

CRN 78-10-4

CMF C8 H20 O4 Si

L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:819983 CAPLUS

DN 141:340377

TI Fluororesins and photosensitive compositions therewith having good ink repellency and developability

IN Takahashi, Hideyuki; Ishiseki, Kenji

PA Asahi Glass Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 24 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	JP 2004277494	A2	20041007	JP 2003-68216	20030313
PRAI	JP 2003-68216		20030313		

AB The fluororesins have ≥2 (/group)-F-substituted C≤20 alkyls,

(B) (SiR1R2O)nSiR1R2R3 [R1, R2 = H, (cyclo)alkyl, aryl; R3 = H, C1-10 organic group; n = 1-200 integer], and acidic groups and satisfy acid value 5-300 mg-KOH/g. Compns. of the fluororesins, photoacid generators, and crosslinking agents bearing two or more groups reactive with the acidic groups of the fluororesins, are also claimed. Compns. of the fluororesins, radical photopolymn. initiators, and compds. bearing ≥2 ethylenic double bonds and free from acidic groups, are further claimed. These compns. provide fine patterns on ink-jet printers and are

useful for circuit-fabricating masks. 769937-09-9P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (photosensitive resin compns. containing polysiloxanyl-bearing fluororesins and showing good developability and ink repellency)

RN 769937-09-9 CAPLUS

2-Propenoic acid, 2-methyl-, polymer with cyclohexyl 2-methyl-2-propenoate, α -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]- ω -[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)] and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

IT

CN

CRN 123109-42-2 CMF (C2 H6 O Si)n C12 H26 O3 Si2 CCI PMS

CM 2

CRN 2144-53-8 CMF C12 H9 F13 O2

CM 3

CRN 101-43-9 CMF C10 H16 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

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L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN AN 2005:890694 CAPLUS
DN 143:250975
TI Polymor electrolyte compositions for fuel cells
```

TI Polymer electrolyte compositions for fuel cells, compositions for fuel cell electrodes, and fuel cells

IN Owada, Satoshi; Kida, Masahiro

PA Aisin Seiki Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT. 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	JP 2005228671	A2	20050825	JP 2004-37990	20040216	
PRAI	[JP 2004-37990		20040216			

AB The electrolyte compns. are block copolymers of vinyl monomers and dialkylsiloxanes and includes ion-exchangeable proton-conducting side chains derived from vinyl monomers. Preferably, the block copolymers having structures (CHXCR1Y)nZ(SiR2R3O)m (R1-3 = H, C1-4 alkyl; X = H, carboxyl; Y = carboxyl, Ph, cyano, hydrolyzed silyl; Z = SiR2R3O, CONH; n, m = integer; ≥1 of X, Y, and R1 contains proton-conducting group). Fuel cell electrode compns. consisting of the said electrolyte compns. containing redox catalyst powder and fuel cells containing the said electrolyte compns. or the electrode compns. are also claimed. The electrolytes have good balance of hydrophilic and hydrophobic structures.

IT 863322-48-9P

RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (acrylic-polysiloxane polyelectrolyte compns. for fuel cell electrolytes and fuel cell electrodes)

RN 863322-48-9 CAPLUS

CN Pentanoic acid, 4,4'-azobis[4-cyano-, polymer with 3,3'-(1,1,3,3,5,5-hexamethyl-1,5-trisiloxanediyl)bis[1-propanamine] and sodium ethenylbenzenesulfonate, block (9CI) (CA INDEX NAME)

CM · 1

CRN 89467-59-4 CMF C12 H34 N2 O2 Si3

CM 2

CRN 27457-28-9 CMF C8 H8 O3 S . Na CCI IDS



$$D1-CH=CH_2$$

Na

CM 3

CRN 2638-94-0 CMF C12 H16 N4 O4

$$\begin{array}{c} \text{Me} \\ | \\ \text{N} = \text{N} - \text{C} - \text{CH}_2 - \text{CH}_2 - \text{CO}_2 \text{H} \\ | \\ \text{HO}_2 \text{C} - \text{CH}_2 - \text{CH}_2 - \text{C} - \text{Me} \\ | \\ \text{CN} \end{array}$$

```
ΑN
     2005:490391 CAPLUS
DN
     143:27344
     Fluoropolymer-modified polysiloxanes useful as oil repellents
ΤI
     Hupfield, Peter Cheshire
IN
PA
     Dow Corning Corporation, USA
     PCT Int. Appl., 18 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
FAN.CNT 1
                         KIND
                                            APPLICATION NO.
     PATENT NO.
                                DATE
ΡI
     WO 2005052030
                         A1
                                20050609
                                           WO 2004-US38481
                                                                    20041112
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
             SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
PRAI GB 2003-27067
                                20031121
                          Α
     A polymeric product having oil repellent properties comprises an
AB
     amino-functional polysiloxane (A) bonded through its amino
     groups to an addition copolymer (B) of (B1) a fluoro-substituted alkyl ester
     of an olefinically unsatd. carboxylic acid and (B2) an olefinically
     unsatd. monomer having a functional group capable of reacting with the
     amino groups of polysiloxane (A) and optionally (B3) one or more
     olefinically unsatd. co-monomers. The polymeric products are are suitable
     for application to fibrous substrates such as textiles, leather
     and paper, to impart oil (oleophobicity) and water repellent
     (hydrophobicity) properties to the treated material.
IT
     97917-34-5DP, reaction products with glycidyl-containing
     fluoroacrylate polymers
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (fluoropolymer-modified polysiloxanes useful as oil repellents
RN
     97917-34-5 CAPLUS
     Poly[oxy(dimethylsilylene)], \alpha-[(3-aminopropyl)dimethylsilyl]-
CN
     ω-[[(3-aminopropyl)dimethylsilyl]oxy]- (9CI) (CA INDEX NAME)
RE.CNT 2
              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L15
     ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     2002:654500 CAPLUS
DN
     137:187158
ΤI
     Aqueous protective polishing agents for hard surfaces
IN
     Tanetani, Toshiyuki; Takishita, Katsuhisa
     Ishihara Yakuhin Co., Ltd., Japan
PA
SO
     Jpn. Kokai Tokkyo Koho, 16 pp.
     CODEN: JKXXAF
DT
     Patent
```

ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

L15

,LA

Japanese

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FAN.CNT 1
```

PATENT NO.

ΡI	JP 2002241705	A2	20020828	JP 2001-39148	20010215
PRAI	JP 2001-39148		20010215		
AB	Title agents comp	rise oily	protective	glossy components 5	5-50, surfactants
	0.01-2, amphiphil	ic polymer	cic tackifie	rs $0.01-0.2$, and UN	/ absorbers
	0.01-0.5% (prefer	ably) and	show a visc	osity (VS) of $100-3$	3,000 cSt. A
	composition compr	ising KF 9	6-350 10, K	F 96-3000 10, Noige	en ET 95 0.8, Noigen ES
	0.01, Silwet FZ 2	161 0.01,	Pemulen TR	1 0.06, Uvinul MS 4	10 0.05,
	triethanolamine 0	.06% with	balanced am	ount of water showe	ed VS 500 cSt, good
	emulsion condition	n at 50° f	or 1 mo. an	d good gloss, water	· .

repellency, and soil resistance at outdoor over 2 mo. 42557-10-8, KF 96-350 ΙT

RL: TEM (Technical or engineered material use); USES (Uses) (aqueous polishes containing glossy components and UV absorbers and amphiphilic polymer tackifiers and surfactants for hard surfaces)

APPLICATION NO.

DATE

RN 42557-10-8 CAPLUS

CNPoly[oxy(dimethylsilylene)], α -(trimethylsilyl)- ω -[(trimethylsilyl)oxy] - (9CI) (CA INDEX NAME)

KIND

DATE

ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:776196 CAPLUS

DN 128:49415

ΤI Oil- and water-repellent F-containing polyurethanes, providing good laundry air-dry performance on fibrous substrates

IN Audenaert, Frans A.; Allewaert, Kathy E. M. L. A.; Hooftman, Gert; Nagase, Makoto; Lens, Hugo R.

PA Minnesota Mining and Manufacturing Company, USA

SO PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DT Patent

English LΑ

FAN.	CNT	1																
	PAT	CENT	NO.					DATE									ATE	
ΡI	WO	9744	375														9970	512
		W:	ΑL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
			DK,	EE,	ES,	FI,	GB,	GE,	GH,	HU,	ΙL,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,
			LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,
			PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	TJ,	TM,	TR,	TT,	UA,	UG,	UZ,	VN,
								ΚZ,										
		RW:	GH,															
								ΝL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
						SN,												
			902															
			665															
	EΡ	8985	88			A1		1999	0303	1	EP 1	997-	9255	63		1	9970	512
	EΡ	8985	88			B1		2001	0627									
			BE,															
	CN	1218	483			Α		1999	0602	(CN 1	997-	1946	70		1	9970	512
	CN	1136	246 557 001			В		2004	0128									
	US	5910	557			Α		1999	9608	. 1	JS 1	997-	8558	03		1	9970	512
	BR	9709	001			Α		1999	0803]	3R 1	997-	9001			1	9970	512
	JP	2000	5115	74		T2		2000	0905		JP 1	997-	5425	07		1	9970	512
			0110					2000			KR 1	998-	7091	60		1	9981	113
RAI			-1079					1996	0517									
	WO	1997	-US8:	140		W		1997										
.B	.F-c	conta	ining	g po	lyur	ethar	nes	with	the	tit:	le p	rope	rtie	s are	e mai	nufa	ctur	ed by

of (a) di-, tri-, or tetravalent isocyanates or their combinations, (b) ≥1 difunctional chain extender, (c) ≥1 blocking group, and a fluorooligomer that is reactive the free NCO groups and is prepared by oligomerization of unsatd. fluorocompds. and optionally F-free unsatd. compds. in the presence of ≥1 functionalized chain-transfer agent. A typical F-containing polyurethane is manufactured by polymerization of 3 parts PAPI with 2 parts Arcol P1004 (polypropylene glycol) in the presence of 3 parts Me Et ketoxime and 2 parts oligomer prepared by polymerization of Nmethylperfluorooctanesulfonamidoethyl acrylate in the presence of 2-mercaptoethanol at a 4:1 ratio, resp.

199856-43-4DP, reaction products with mercaptoethanolfluoroacrylic polymer adducts and NCO-reactive blocking agents RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (oil- and water-repellent F-containing polyurethanes, providing good laundry air-dry performance on fibrous substrates)

199856-43-4 CAPLUS

Isocyanic acid, polymethylenepolyphenylene ester, polymer with α -[(3-hydroxypropyl)dimethylsilyl]- ω -[[(3hydroxypropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA INDEX NAME)

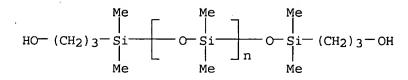
CM 1

ΙT

RN

CN

CRN 58130-02-2 CMF (C2 H6 O Si)n C10 H26 O3 Si2 PMS CCI



CM 2

CRN 9016-87-9 CMF Unspecified CCI PMS, MAN

STRUCTURE DIAGRAM IS NOT AVAILABLE ***

```
ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
L15
AN
     1995:746132 CAPLUS
DN
     123:172559
     High-performance oil- and water-repellent compositions, its use
TI
     and substrates treated by
IN
     Coppens, Dirk M.; Allewaert, Kathy Emilie Augusta
PΑ
     Minnesota Mining and Manufacturing Co., USA
SO
     Eur. Pat. Appl., 13 pp.
     CODEN: EPXXDW
DT
     Patent
LΑ
     English
FAN.CNT 1
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
     PATENT NO.
                         _ _ _ _
PΙ
     EP 648890
                          A1
                                19950419
                                            EP 1993-116871
                                                                    19931019
     EP 648890
                          В1
                                19961211
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                19950420
     CA 2133173
                          AΑ
                                            CA 1994-2133173
                                                                    19940928
                          A2
     JP 07216347
                                19950815
                                            JP 1994-245058
                                                                    19941011
                                            US 1994-323381
                                                                    19941014
     US 5536304
                          Α
                                19960716
PRAI EP 1993-116871
                          Α
                                19931019
     Title composition comprises a fluoroaliph. radical-containing agent and a cyclic
AB
     carboxylic anhydride-containing polysiloxane. Addnl., the composition
     may comprise an extender and/or a plasticizer. The composition provides water-
     and oil repellent properties and a soft hand to fibrous and
     other substrates using a simple 1-step treatment. A blend of a succinic
     anhydride-terminated di-Me siloxane and a poly(fluoroalkyl
     methacrylate) was applied to cotton by solvent padding and dried to give a
     fabric with oil repellency rating 2, spray rating 90, and hand 4
     (higher value correlates with softer feel), compared to 0, 50, and 2,
     resp., when di-Me siloxane was incorporated instead of the
     succinic anhydride-terminated di-Me siloxane.
ΙT
     161205-23-8
```

RL: TEM (Technical or engineered material use); USES (Uses) (in high-performance oil- and water-repellent compns.)

RN161205-23-8 CAPLUS

CN Poly $\{oxy(dimethylsilylene)\}$, $\alpha - [dimethyl[3 - (tetrahydro - 2, 5 - dioxo - 3 - dioxo$ furanyl)propyl]silyl]- ω -[[dimethyl[3-(tetrahydro-2,5-dioxo-3furanyl)propyl]silyl]oxy] - (9CI) (CA INDEX NAME)

$$(CH_2)_3 - Si - O - Si - O - Si - (CH_2)_3 - O - Me$$
Me Me Me Me

L15 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AΝ 1995:266998 CAPLUS

DN 122:163427

TI Polysiloxanes with fluoroaliphatic- and carboxyl-containing terminal groups, their manufacture and use in the treatment of fibrous substrates and leather

Minnesota Mining and Manufacturing Co., USA PA

Ger. Offen., 16 pp. SO

CODEN: GWXXBX

DT Patent

LA · German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	DE 4240274	A1	19940609	DE 1992-4240274	19921201	
	DE 4240274	B4	20040212			
	DE 4244951	C2	19980806	DE 1992-4244951	19921201	

```
WO 9412561
                                 19940609
                          Α1
                                             WO 1993-US10524
                                                                      19931103
         W: AU, BR, CA, JP, KR, NZ
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     AU 9454568
                           A1
                                 19940622
                                             AU 1994-54568
                                                                      19931103
     US 5385999
                                 19950131
                                             US 1993-147338
                                                                      19931103
                           Α
     EP 672079
                           A1
                                 19950920
                                              EP 1993-925148
                                                                      19931103
     EP 672079
                           B1
                                 19970806
                         GB, IT
         R:
             DE, ES, FR,
                           Т3
                                             ES 1993-925148
                                 19971016
                                                                      19931103
     ES 2105350
                                             BR 1993-7553
                                                                      19931103
     BR 9307553
                                 19990525
                           Α
                                             CN 1993-120698
                                                                      19931130
     CN 1089962
                           Α
                                 19940727
     CN 1036786
                           В
                                 19971224
PRAI DE 1992-4240274
                           A3
                                 19921201
     WO 1993-US10524
                           W
                                 19931103
AB
     Polysiloxanes comprise fluoroaliph. - and carboxyl-containing terminal units
```

connected to a diorganosilyloxy group or other terminal units connected to other diorganosilyloxy groups, or a cyclic carboxylic acid anhydride-containing group connected to other diorganosilyloxy groups, as well as carboxylic acid derivs. of the polysiloxane. A process for the manufacture of the polysiloxanes from the anhydride terminated polysiloxane, their use as oil-, soil- and waterproofing agents, and as a softener for leather, and the treated fibrous substrates are also claimed. The use of these siloxanes gives good waterand oilproofing to leather and cotton-polyester textiles and provides a soft hand. Di-Me siloxane terminated with succinic acid anhydride groups was reacted with N-methyl-N-(2-hydroxyethyl)perfluorooctanesulfonamide, treated with NH3, and was used to treat leather to give an oil-repellency rating 1-2, water repellency 3, spray rating 100, and a soft hand compared to 0, 1, 70, and dry, hard, sticky hand, resp., for a comparison, known product.

IT 161205-23-8

CN

CN

RL: RCT (Reactant); RACT (Reactant or reagent) (polysiloxanes with fluoroaliph. - and carboxyl-containing terminal groups, their manufacture and use in the treatment of fibrous substrates)

RN 161205-23-8 CAPLUS

Poly [oxy (dimethylsilylene)], α -[dimethyl [3-(tetrahydro-2,5-dioxo-3furanyl)propyl]silyl]- ω -[[dimethyl[3-(tetrahydro-2,5-dioxo-3furanyl)propyl]silyl]oxy] - (9CI) (CA INDEX NAME)

$$(CH_2)_3 - Si - O - Si - (CH_2)_3 - O - Me$$

$$Me - Me - Me$$

$$Me - Me - Me$$

$$Me - Me - Me$$

161238-84-2P 161238-85-3P 161238-86-4P 161238-88-6P 161238-90-0P 161344-02-1P 161344-03-2P 161344-04-3P

RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PREP (Preparation); USES (Uses)

(polysiloxanes with fluoroaliph. - and carboxyl-containing terminal groups, their manufacture and use in the treatment of fibrous substrates including leather)

RN 161238-84-2 CAPLUS

Poly[oxy(dimethylsilylene)], α -[(4,5-dicarboxypentyl)dimethylsilyl]- ω -[[(4,5-dicarboxypentyl)dimethylsilyl]oxy]-, α , ω -bis[2-[[(heptadecafluorooctyl)sulfonyl]methylamino]ethyl] ester, diammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 161238-83-1 CMF (C2 H6 O Si)n C18 H34 O9 Si2 CCI PMS

PAGE 1-B

— co₂н

CN

CM 2

CRN 24448-09-7 CMF C11 H8 F17 N O3 S

RN 161238-85-3 CAPLUS

Poly[oxy(dimethylsilylene)], α -[(4,5-dicarboxypentyl)dimethylsilyl]- ω -[[(4,5-dicarboxypentyl)dimethylsilyl]oxy]-, α , ω -bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl) ester, diammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 161238-83-1 CMF (C2 H6 O Si)n C18 H34 O9 Si2 CCI PMS

PAGE 1-B

-co₂н

CM 2

CRN 865-86-1 CMF C12 H5 F21 O

```
HO-CH_2-CH_2-(CF_2)_9-CF_3
```

RN 161238-86-4 CAPLUS

Poly[oxy(dimethylsilylene)], α -[(4,5-dicarboxypentyl)dimethylsilyl]- ω -[[(4,5-dicarboxypentyl)dimethylsilyl]oxy]-, α , ω -bis[1-(chloromethyl)-2-[2-[[(heptadecafluorooctyl)sulfonyl]methylamino]ethoxy]ethyl] ester, diammonium salt (9CI) (CA INDEX NAME)

CM 1

CN

CRN 161238-83-1

CMF (C2 H6 O Si)n C18 H34 O9 Si2

CCI PMS

PAGE 1-A
$$CO_2H$$
 Me Me Me CO_2H $HO_2C-CH_2-CH-(CH_2)_3-Si-O-Si-(CH_2)_3-CH-CH_2-Me$ Me Me Me Me Me

PAGE 1-B

— co2н

CM 2

CRN 100997-35-1

CMF C14 H13 C1 F17 N O4 S

RN 161238-88-6 CAPLUS CN' Poly[oxy(dimethylsi

Poly[oxy(dimethylsilylene)], α -[[4(or 5)-carboxy-5(or 4)-[[2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl]amino]carbonyl]pentyl]dimethylsilyl]- ω -[[[4(or 5)-carboxy-5(or 4)-[[2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl]amino]carbonyl]pentyl]dimethylsilyl]oxy]-, compd. with N,N-diethylethanamine (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 121-44-8 CMF C6 H15 N

CM 2

```
CRN 161238-87-5
CMF (C2 H6 O Si)n C42 H52 F34 N4 O11 S2 Si2
CCI IDS, PMS

CM 3

CRN 161238-83-1
CMF (C2 H6 O Si)n C18 H34 O9 Si2
CCI PMS
```

PAGE 1-A
$$CO_2H$$
 Me Me Me CO_2H $HO_2C-CH_2-CH-(CH_2)_3-Si$ $O-Si-(CH_2)_3-CH-CH_2-Me$ Me Me Me Me Me

PAGE 1-B

— co₂н

CM 4

CRN 13406-91-2 CMF C12 H11 F17 N2 O2 S

RN 161238-90-0 CAPLUS
CN Poly[oxy(dimethylsilylene)], α -[(4,5-dicarboxypentyl)dimethylsilyl]- ω -[[(4,5-dicarboxypentyl)dimethylsilyl]oxy]-, α , ω - diester with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-1-dodecanethiol, compd. with N,N-diethylethanamine (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 121-44-8 CMF C6 H15 N

CM 2

CRN 161238-89-7 CMF (C2 H6 O Si)n C42 H40 F42 O7 S2 Si2 CCI IDS, PMS

CM 3

CRN 161238-83-1 CMF (C2 H6 O Si)n C18 H34 O9 Si2 CCI PMS

PAGE 1-B

— со2н

CM 4

CRN 34451-28-0 CMF C12 H5 F21 S

 $HS-CH_2-CH_2-(CF_2)_9-CF_3$

RN 161344-02-1 CAPLUS CN Poly[oxy(dimethylsilylene)], α -[(4,5-dicarboxypentyl)dimethylsilyl]- ω -[[(4,5-dicarboxypentyl)dimethylsilyl]oxy]-, α , ω -bis[2-[[(heptadecafluorooctyl)sulfonyl]methylamino]ethyl] ester, compd. with N,N-diethylethanamine (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 121-44-8 CMF C6 H15 N

Et | Et-N-Et

CM 2

CRN 161344-01-0

CMF (C2 H6 O Si)n C40 H46 F34 N2 O13 S2 Si2

CCI IDS, PMS

CM 3

CRN 161238-83-1

CMF (C2 H6 O Si)n C18 H34 O9 Si2

CCI PMS

PAGE 1-A

$$CO_2H$$
 $HO_2C-CH_2-CH-(CH_2)_3-Si-CH-CH_2 Me$
 Me
 Me

— co₂н

CM 4

CRN 24448-09-7 CMF C11 H8 F17 N O3 S

$$O = S - (CF_2)_7 - CF_3$$
 $O = S - (CF_2)_7 - CF_3$
 $O = S - (CF_2)_7 - CF_3$
 $O = S - (CF_2)_7 - CF_3$
 $O = S - (CF_2)_7 - CF_3$

RN 161344-03-2 CAPLUS

CN Morpholine, compd. with α -[(4,5-dicarboxypentyl)dimethylsilyl]- ω -[[(4,5-dicarboxypentyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] α , ω -bis[2-[[(heptadecafluorooctyl)sulfonyl]methylamino]ethy

1] ester (2:1) (9CI) (CA INDEX NAME)

CM 1

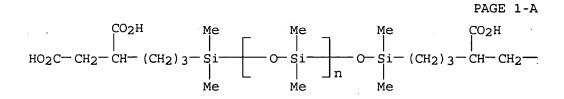
CRN 110-91-8 CMF C4 H9 N O

CM 2

CRN 161344-01-0 CMF (C2 H6 O Si)n C40 H46 F34 N2 O13 S2 Si2 CCI IDS, PMS

CM 3

CRN 161238-83-1 CMF (C2 H6 O Si)n C18 H34 O9 Si2 CCI PMS



PAGE 1-B

CRN 24448-09-7

CMF C11 H8 F17 N O3 S

$$O = S - (CF_2)_7 - CF_3$$
 $O = S - (CF_2)_7 - CF_3$
 $O = S - (CF_2)_7 - CF_3$
 $O = S - (CF_2)_7 - CF_3$

RN 161344-04-3 CAPLUS

CN Poly[oxy(dimethylsilylene)], α -[(4,5-dicarboxypentyl)dimethylsilyl]- ω -[[(4,5-dicarboxypentyl)dimethylsilyl]oxy]-, α , ω -bis[2-[[(heptadecafluorooctyl)sulfonyl]methylamino]ethyl] ester, dipotassium salt (9CI) (CA INDEX NAME)

CM 1

161238-83-1 CRN

CMF (C2 H6 O Si)n C18 H34 O9 Si2

CCI

PAGE 1-A
$$CO_2H$$
 Me Me Me CO_2H $HO_2C-CH_2-CH-(CH_2)_3-Si$ $O-Si$ $O-Si$ $O-Si$ $O-Si$ $O-Si$ $O-Si$ $O-Si$

PAGE 1-B

CO₂H

CM 2

CRN 24448-09-7

CMF C11 H8 F17 N O3 S

$$0 = S - (CF_2)_7 - CF_3$$

$$Me - N - CH_2 - CH_2 - OH$$

L15 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ΑN 1969:69025 CAPLUS

DN 70:69025

ΤI Water repellents from silicon hydride polysiloxanes and silanes having alkenyl radicals

IN Quaal, George J.

PA Dow Corning Corp.

SO U.S., 6 pp.

CODEN: USXXAM

DTPatent LΑ English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE -----______ ____ _____ PΙ US 3423236 Α 19690121 US 1964-402941 19641009 PRAI US 1964-402941 Α 19641009 Siloxane copolymers (I) prepared from silicon hydride siloxane polymers and alkenyl-containing silanes were cured with an aminoorganosilicon compound I can be used as a water repellent for fabrics, paper, glass, leather, wood, or masonry products. Thus, a mixture of 60 g. trimethylsilyl-endblocked methylhydrogenpolysiloxane having a viscosity of 32.9 cs. at 25°, 180 g. H2C:CHSiMe2OSiMe3 and 0.2 g. of a mixture of 1% Pt-C was heated to 180° and refluxed for 2.5 hrs. to give 73.7 mole % [OSiMeCH2CH2SiMe2OSiMe3] and .apprx.26.3 mole % [MeSiHO], which had a viscosity of 3369 cs. at 25°. A solution of 3.5 g. of the siloxane copolymer, 120 ml. perchloroethylene and 0.3 g. (MeO) 3Si(CH2) 3NHCH2CH2NH2 was applied to tan sateen by dipping the fabric into the solution and then padding. The treated fabric was air dried and cured 3 min. at 176°. The treated fabric showed a spray rating of 100. The water repellency of the cured fabric was determined by using the spray rating test ASTM D-583-58 or the spray test of AATCC Standard Test Method 22-1961. IT7087-20-9 RL: USES (Uses) (siloxanes from, for water repellent textiles) 7087-20-9 CAPLUS RN

Trisiloxane, 1,1,1,3,5,5,5-heptamethyl-3-(2-propenyl)- (9CI) (CA: INDEX

NAME)

CN

(FILE 'HOME' ENTERED AT 11:17:04 ON 30 OCT 2005)

FILE 'REGISTRY' ENTERED AT 11:20:20 ON 30 OCT 2005

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L1
                STRUCTURE UPLOADED
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L2
L3
         11023 S L1 FUL
     FILE 'CAPLUS, CAOLD' ENTERED AT 11:21:17 ON 30 OCT 2005
L4
             30 S L2
        . 10491 S L3
L5
L6
              0 S L4 AND LEATHER
L7
              3 S L4 AND ?REPELLEN?
L8
              0 S L4 AND WATERPROOF?
L9
            24 S L4 AND ?SILOXANE
L10
             1 S L9 AND CARBOXY?
L11
             51 S L5 AND LEATHER
L12
              6 S L11 AND ?REPELLEN?
L13
             6 S L12 NOT L7
             6 S L13 NOT L10
L14
L15
              6 S L14 AND ?SILOXANE
=> d 11
L1 HAS NO ANSWERS
L1
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Structure attributes must be viewed using STN Express query preparation.